

**Draft Cultural Resources Inventory Report for the  
UC Santa Cruz Ranch View Terrace Project, South  
UCSC Campus, Santa Cruz County, California**

*Prepared for:*

University of California, Santa Cruz  
Environmental Assessment Group  
515 Swift Street  
Santa Cruz, CA 95060  
Contact: Christine Aldecoa  
831/460-3573

*Prepared by:*

Jones & Stokes  
2600 V Street  
Sacramento, CA 95818  
Contact: David Byrd  
916/737-3000

July 2004

This document should be cited as:

Jones & Stokes. 2004. Cultural resources inventory report for the UC Santa Cruz Ranch View Terrace project, south UCSC Campus, Santa Cruz County, California. July. (J&S 02-428.) Sacramento, CA. Prepared for Environmental Assessment Group, University of California, Santa Cruz.

# Contents

---

	Page
INTRODUCTION .....	1
REGULATORY SETTING.....	1
CULTURAL SETTING .....	2
Prehistory.....	2
Ethnography.....	3
Historic Context .....	4
METHODS AND RESULTS .....	5
Records Search and Archival Research.....	6
Contacts with Potentially Interested Parties .....	6
Archaeological Field Survey .....	6
Architectural Inventory.....	7
Conclusions .....	9
REFERENCES CITED .....	12
APPENDIX.....	14

Figure	Follows Page
1 Regional Location.....	1
2 Project Sites and Permit Area .....	1
3 Area of Potential Effects.....	5

## INTRODUCTION

Jones & Stokes was contracted by the University of California, Santa Cruz (UCSC) to conduct cultural resources studies for the Ranch View Terrace faculty housing development proposed for Inclusion Area D, in the southern portion of the UCSC campus, adjacent to the main campus entrance. Inclusion Area D is one of five inclusion areas that are designated in the 1989 UCSC Long Range Development Plan as areas to support "...University-affiliated, non-academic facilities advantageous to the functioning of the campus community," with priority given to providing housing for faculty and staff, graduate students, students with families, and single students. The Ranch View Terrace project (hereafter, Project) is included in this plan. It would entail the construction of 80 homes, 4 apartments, and a community center, and installation of an access road, support infrastructure, and low-maintenance drought-tolerant landscaping. The proposed development footprint covers approximately 13 acres in the northern half of Inclusion Area D (Figure 1, Figure 2). The remainder of Inclusion Area D (approximately 12.5 acres) would remain undeveloped except for a utility corridor serving the new faculty housing.

## REGULATORY SETTING

Implementation of the project would require compliance with the Federal Endangered Species Act of 1973 (ESA), as amended, because construction and operation/occupation of the Project may result in incidental take of the Ohlone tiger beetle (*Cicendela ohlone*) (federally listed as endangered) and California red-legged frog (*Rana aurora draytonii*) (federally listed as threatened). Section 9[a][1] of the ESA prohibits the take of listed species. However, under the 1982 amendments to Section 10 of the ESA, the U.S. Fish and Wildlife Service (Service) may issue a permit allowing incidental take if the project proponent submits a Habitat Conservation Plan (HCP) and the HCP is approved by the Service. The Regents are currently in the process of preparing the Ranch View Terrace HCP for these two species. Issuance of the incidental take permit, as a result of Service approval of the HCP, would constitute a Federal action by the Service and is thus subject to the National Historic Preservation Act of 1966.

The studies described in this report were conducted in compliance with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations (36 CFR Part 800, as amended in 1999). Section 106 requires Federal agencies and entities that they fund or permit to consider the effects of their actions on properties that are listed in the National Register of Historic Places (NRHP), or may be eligible for such listing. To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated.

The Section 106 review process consists of four steps.

1. Initiate the Section 106 process by establishing the undertaking, developing a plan for public involvement, and identifying other consulting parties.
2. Identify *historic properties* (resources that are eligible for inclusion in the NRHP) by determining the scope of efforts, identifying cultural resources within the area potentially affected by the project, and evaluating resources' eligibility for NRHP inclusion.
3. Assess adverse effects by applying the Section 106 Criteria of Adverse Effect to identified historic properties.
4. Resolve adverse effects by consulting with the State Historic Preservation Officer (SHPO) and other consulting agencies, including the Advisory Council on Historic Preservation if necessary, to develop an agreement that addresses the treatment of historic properties.

## CULTURAL SETTING

### Prehistory

The Monterey Bay area was largely ignored by archaeologists working out of Berkeley in the 1940s and 1950s, the formative years of California archaeology. A considerable amount of work has been done in Monterey and Santa Cruz Counties over the past 20 years, and an outline of the region's prehistory is emerging. However, the sample of sites excavated to date is comparatively small, and problems with stratigraphic and chronometric control persist. Consequently, the prehistory of the Monterey Bay area is less well known than that of many other parts of northern California, and much remains to be done. The following brief summary of the chronology of the Monterey Bay area is based primarily on Cartier (1993a, 1993b), Hylkema (1991), Hildebrandt and Mikkelsen (1993), and Jones (1993).

Sites in Monterey and Santa Cruz Counties provide evidence that humans occupied the Monterey Bay area as early as 8,000 B.C., but the assemblages from these sites remain poorly defined. As a result, the PaleoIndian and Millingstone Periods, recognized as distinct and separate elsewhere in the region, are combined in this area. PaleoIndian-Millingstone (8,000–3,500 B.C.) assemblages are characterized by eccentric crescent, bi-pointed, leaf-shaped bifaces; unifaces and cobble and core tools; and milling slabs and handstones. The characteristic lithic materials are basalt and quartzite. Economic patterns during this period are believed to have been very generalized, with small groups engaging in opportunistic subsistence foraging.

Early Period (3,500–600 B.C.) assemblages are characterized by rectangular, end-ground, and split *Olivella* beads; square *Halotis* beads; contracting stemmed, Rossi squared-stemmed, and side-notched projectile points; mortars and pestles; and handstones and millingstones.

The Middle Period (600 B.C.–A.D. 1000) is represented by CA-SCr-9 in the Santa Cruz Mountains. The assemblage from this site is characterized by Año Nuevo long-stemmed, Rossi square-stemmed, contracting-stemmed, side-notched, and concave-base projectile points; *Olivella* saucer beads; mortars and pesters; and millingstones and handstones.

Middle/Late Period (A.D. 1000–1200) assemblages are characterized by Central Coast stemmed series and small leaf-shaped projectile points; hopper and bowl mortars and pestles; and millingslabs.

Late Period (A.D. 1200–1769) assemblages are difficult to characterize because known sites are generally devoid of artifacts. Economic patterns appear to have shifted around A.D. 1000, with the earlier generalized economic pattern giving way to a more specialized subsistence strategy based on seasonal rounds and storage. This is recorded in processing sites, seasonal resource collecting camps (hunting camps, acorn processing camps), and coastal sites consisting primarily of shell middens. Because of the paucity of the record, the assemblage that typifies the Late Period is based almost entirely on one site, CA-SCr-20 in the Santa Cruz Mountains, which has yielded an assemblage consisting of *Olivella* rectangle and cupped beads, desert side notched points, and small serrated arrow points.

## Ethnography

At the time of European contact, the Santa Cruz region was occupied by a group of Native Americans referred to by ethnographers as Costanoans (from the Spanish *costeños*, “people of the coast”) or Ohlone. The traditional territory of the Ohlone extended from San Francisco Bay in the north to just beyond Carmel in the south, and as far inland as about 60 miles, encompassing a lengthy coastline as well as several inland valleys (Breschini et al. 1983). The primary source for ethnographic information about the Ohlone is the Culture Element Distribution lists compiled by Harrington (1942). Other sources include explorers’ notes and other materials produced by missionaries and seafarers who came in contact with the Ohlone. Much of this information has been summarized by Levy (1978).

The Ohlone were hunter-gatherers who relied heavily on acorns and various seafoods but also used a wide range of other natural resources for food, shelter, and the production of material goods. Key resources included plant materials, including various seeds, berries, and roots; land and sea mammals; waterfowl; reptiles; and insects. The Ohlone are known to have made a range of lithic and bone tools, as well as balsas (small watercraft constructed of reeds), bows and arrows, cordage, sea otter blankets, and twined basketry. Minerals were used as coloring agents in body paints; hematite and cinnabar yielded red pigment and white was obtained from clay. Like many native Californians, the Ohlone practiced controlled burning to promote a consistent and abundant resource supply (Levy 1978).

The Ohlone were politically organized by tribelet. A tribelet consisted of one or more villages and camps within a territory designated by physiographic features. Tribelets generally had 100–250 members (Kroeber 1976 [1925]). Marriages were polygynous, households were

generally composed of patrilineally extended families, and clans and moieties were the basis for group identification (Levy 1978).

The office of tribelet chief was inherited patrilineally and could be occupied by a man or a woman. Duties of the chief included providing for visitors; directing ceremonial activities; and leading fishing, hunting, gathering, and warfare expeditions. The chief served as the leader of a council of elders, which functioned primarily in an advisory capacity to the community (Levy 1978).

In the realm of religion, prayers and offerings were practiced, as well as shamanism and witchcraft. Dreams were interpreted and used as guides for future activities (Levy 1978).

Levy (1978) has estimated that in 1770, when the first mission was established in Ohlone territory, the population numbered around 10,000, but it was reduced to less than 2,000 by 1832 as a result of introduced disease and a declining birth rate. Today, descendants of the Ohlone still live in the region, and many are active in maintaining their traditions and advocating Native American causes.

### **Historic Context**

The following discussion of historic context is in large part summarized from work of Rodrigues (Paul Rodrigues Landscape Architecture et al. 1992). Information from additional sources is indicated in parenthetical citations.

Santa Cruz County was formed on February 18, 1850. Originally named Branciforte County, it was one of the 27 original counties in the new State of California. In March 1850, the county name was changed to commemorate the location of Mission Santa Cruz (Kyle 1990).

Between 1850 and 1900, the major industries in Santa Cruz County included lumbering and paper production; tanning; fishing and commercial canning; and lime production. By 1880, Santa Cruz County provided half of California's total lime output. Because roads were poor, and overland transport was hindered by the mountains to the east, Santa Cruz relied on steamers and schooners to transport goods to markets in San Francisco and elsewhere. During the latter half of the 19<sup>th</sup> century, Santa Cruz County had three principal shipping centers: Santa Cruz, Capitola, and Davenport. The three wharves at Santa Cruz were the most important in the County, serving as many as 10 vessels weekly. For a time, Santa Cruz was second only to San Francisco as a shipping center. However, this activity declined with the depletion of raw materials and the completion of a railroad spur into Santa Cruz.

One of the most important lime producers in Santa Cruz County during the second half of the 19<sup>th</sup> century was Henry Cowell. Cowell came to California during the Gold Rush. In 1863, he bought into the established lime manufacturing company owned by Isaac Davis and Albion Jordan. A short time later, Cowell moved with his wife to Santa Cruz. By the 1880s, Cowell

and his partner Davis had acquired many of the other lime manufacturers in the County and their enterprise was the largest lime company on the west coast. The Cowell Company continued to be a leader in the production of lime for the northern California building trades through the latter part of the 19<sup>th</sup> century and in the development of the northern California cement industry in the early 20<sup>th</sup> century.

By the beginning of the 20<sup>th</sup> century, extractive industries in Santa Cruz County began to decline and the tourist industry began to develop. The railroad provided easy access to the City of Santa Cruz, which soon began to gain a reputation as a resort. By 1903, Fred Swanton had opened a beach resort with tent cabins. Within three years, he constructed a giant casino and natatorium on the beach, securing the City's reputation as a vacation destination.

In 1961, the Regents of the University of California entered into negotiations with the S.H. Cowell Foundation to purchase more than 2000 acres of the Cowell Ranch property to establish a new campus. The first chancellor of the new university, Dean McHenry, set up administration offices in the former Carriage House in 1963, and a new road to the main campus was constructed through the former Cowell lime kiln area. In 1964, construction began on campus offices, classroom buildings, and dormitories. The first classes were held the following year. The campus has continued to develop, with new buildings, roads, bike paths, and supporting infrastructure. However, despite this development, the campus maintains a rural quality that is an important aspect of its character.

## METHODS AND RESULTS

Efforts to identify cultural resources within the Area of Potential Effects (APE) consisted of

- conducting a records search and archival research,
- contacting potentially interested parties,
- conducting a pedestrian field survey for archaeological resources, and
- conducting an architectural inventory.

The following sections describe the methods followed in each phase of the investigation, and present the results. The Area of Potential Effects (APE) encompasses the maximum extent of both indirect and direct effects anticipated for the project, and is shown in Figure 3.



## **Records Search and Archival Research**

A records search was conducted at the Northwest Information Center of the California Historical Resources Information System at Sonoma State University in Rohnert Park on October 22, 2002. The records search entailed consulting the state's database of previous studies, known cultural resources sites, pertinent historical inventories, and historic maps.

The records search revealed that the Project area had been surveyed in 1978 (Edwards et al. 1978). No cultural resources are known to be present within the project area. However, six sites are located within a 0.5-mile radius of the Project area. Two of these are prehistoric lithic scatters. Nearby historic-period cultural resources include a dugout and possible well; an agricultural field; the central buildings of the Cowell Ranching operation (see *Historic Context* above); and another ranching-related site.

## **Contacts with Potentially Interested Parties**

On November 21, 2002, Jones & Stokes contacted the Native American Heritage Commission (NAHC) to request that they conduct a search of their sacred lands database and provide a list of potentially interested Native American representatives for the Project Area. On December 23, 2002, the NAHC responded, stating that their search did not indicate the presence of Native American cultural resources in the Project area and providing a list of 12 Native American representatives (Appendix).

Contact letters describing the Project and requesting comments and concerns were sent to all 12 Native American representatives identified by the NAHC as part of the consultation process required under the NHPA (see Appendix). The contact letters included a figure showing the Project area. As of July 2004, no responses had been received; follow-up telephone calls were conducted and no comments or concerns have been received to date.

Jones & Stokes also contacted potentially interested historical organizations—including the Museum of Art and History in Santa Cruz and the City of Santa Cruz's Historic Preservation Commission—by letter and e-mail. No responses have been received by letter and email to date, even after follow-up contact.

## **Archaeological Field Survey**

On January 24, 2003, Stacy Schneyder Case, a Jones & Stokes archaeologist conducted an intensive pedestrian survey of the project area. Ms. Case is a qualified archeologist who has a M.A. in Cultural Resources Management from Sonoma State University and is on the Register of

Professional Archeologists (RPA). She meets the Secretary of Interior's Standards for an archaeologist.

The entire project area was surveyed using zigzag transects spaced 5–15 meters apart using a combination of north-south and east-west trending transects to attain maximum survey coverage. Cultivated portions of the project area were given cursory survey coverage due to poor visibility. Visibility of the surface ranged from 5 percent to 20 percent throughout the Project Area. Rodent holes and associated back-dirt, as well as other areas with high visibility, were inspected closely for indications of cultural materials.

No archaeological resources were located during this survey. Vegetation at the project location included eucalyptus trees, grasses, and shrubs. A large pile of wood, concrete, and other debris measuring approximately 9 meters high and 15 meters wide was located within the Project area.

### **Architectural Inventory**

On February 18, 2003, a Jones & Stokes architectural historian made a site visit to conduct an architectural inventory of the Project area and immediately adjacent portion of the campus.

The architectural inventory confirmed that there are no architectural resources within the Project area. One historic resource, the Cowell Ranch Historic District complex, which is eligible for listing in the NRHP, is located immediately adjacent to Inclusion Area D. A proposed access road would cross through the northern end of the historic district.

### **Overview of Cowell Ranch Historic District**

The Cowell Ranch Historic District is a collection of 19<sup>th</sup> century vernacular industrial, agricultural, and residential buildings and structures that derives its significance from its role as an early California lime manufacturing plant. The Cowell Ranch is associated with Henry Cowell, an important entrepreneur in Santa Cruz and the greater San Francisco Bay area (see *Historic Context* above).

The period of significance for the Cowell Ranch Historic District is 1853–1906. This span represents the period from construction of the first buildings at the site to support operation of the lime kilns, up to the time the Cowell family moved their lime production operation to a new site at Rubicon. The district is eligible under NRHP Criterion A, because of the role the site played in the development of the lime industry in Santa Cruz County. It is also eligible under Criterion C, as a fine collection of 19<sup>th</sup>- century vernacular buildings.

The Cowell Ranch Historic District contains 16 buildings and two structures that were constructed during the period of significance and retain sufficient integrity to contribute to the significance of the district. Following are the contributing buildings and structures.

- Horse Barn (theater).
- Cookhouse (Admissions Office) and pig feeder.
- Hay barn (maintenance barn) and associated water trough and loading pens.
- Blacksmith shop (classroom).
- Carriage house (Public Information Office).
- Jordan/Cowell residence (Cardiff House Women's Center) and associated outbuilding and planter.
- Paymaster's house/Stone house.
- Worker's cabin west of the lime kilns.
- Five workers' cabins east of Coolidge Road.
- Cooper's shop.
- Henry Cowell lime kilns.
- Pond and water outlet.
- Powder house.
- Jordan/Cowell entry gate and picket fence.

The Cowell Ranch property was originally identified as a historic district in a cultural landscape report (CLR) prepared for UCSC in 1992 (Paul Rodrigues Landscape Architecture et al. 1992). The boundaries of the district were subsequently refined in a report by JRP Historical Consulting Services (1997), which included peer review of the CLR and the draft historic properties survey report (HPSR) prepared for proposed improvements to the Coolidge Road-Campus Facilities Access Road intersection. The findings of JRP's 1997 study were incorporated into the final HPSR (Aldecoa 1997).

Generally, the district boundaries enclose 31 acres and follow the natural contours of the hillside and small valley to include all 18 contributing architectural resources and all archaeological resources. Although UCSC is currently conducting a new evaluation of the

district and its boundaries, the results of which are not known at this time, this report assumes that the recognized historic district boundaries are adequate and valid.

### **Integrity of Cowell Ranch Historic District**

According to National Register Bulletin 15 (*How to Apply the National Register Criteria for Evaluation*), a district consists of a “concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development” (U.S. Department of the Interior, National Park Service 1991). The Cowell Ranch Historic District gains its significance through its association with lime production in the 19<sup>th</sup> century, its association with local entrepreneur Henry Cowell, and the vernacular architecture of the contributing elements. Therefore, the contributing building and structures in the Cowell Ranch Historic District are linked by their historical development and not by an aesthetic plan.

The documentation in which the historic district is identified and defined (JRP Historical Consulting Services 1997, Aldecoa 1997) makes it clear that the historic district retains only a moderate degree of integrity to its period of significance. A district with high integrity would generally include an intact cultural landscape consisting of relatively unmodified buildings and structures within the original spatial organization of the landscape, together with original circulation networks (roads, trails, railroads), historic vegetation, fences, walls, trees, and gardens. Because nearly all of the contributing buildings and structures have been altered or have lost character-defining features, the Cowell Ranch Historic District has retained only a modest level of integrity. In addition, the development of Coolidge Road, new adjacent buildings, parking lots, bike paths, and the existing gravel access road to Inclusion Area D have replaced the historic circulation network and landscape features. Finally, the original Cowell Ranch was several thousand acres in size, while the refined boundary of the 31-acre historic district was established to enclose only the most unaltered buildings, which once formed the industrial and residential core of the ranch. Therefore, the most important features of the Cowell Ranch Historic District are the buildings and structures; the space and environment within and surrounding the structures has been greatly altered.

## **CONCLUSIONS**

Based on archival research and a pedestrian survey, this report concludes that there are no archaeological cultural resources within the Project area. An additional field visit confirmed that there are no architectural resources within the Project area.

One historic resource, the NRHP-eligible Cowell Ranch Historic District complex, is located immediately adjacent to Inclusion Area D, in an area that would be crossed by a proposed access road. However, the Cowell Ranch Historic District retains only a modest level of integrity. The most important features of the district are the buildings and structures; the space and environment within and surrounding the structures has been greatly altered. The

construction of housing on the northern portion of Inclusion Area D would occur outside the Cowell Ranch Historic District and therefore would have no direct effect to the historic district. Although the project would result in the introduction of visual elements out of character with the historic district, the Cowell Ranch Historic District would still be recognizable as the site of 19<sup>th</sup> century industrial lime production and limestone mining. Therefore, it does not appear as if the proposed project would constitute an adverse effect to the significance of the resource. The improvement of the existing gravel road into a paved vehicular access road, along with construction of a separate bike path, would occur within the boundary of the Cowell Ranch Historic District and would have an effect on that resource. However, none of the resources that contribute to the significance of the district would be removed, demolished or altered and it does not appear that the introduction of the new features would interfere with the district's ability to convey its association with the limestone quarrying and limestone production industry in Santa Cruz County. Consequently, it does not appear that the project will result in an adverse effect on the historic district.

### **Mitigation Measures**

The existence of cultural resources can never be predicted with certainty. To address this uncertainty, the UC Regents have incorporated general measures into the proposed Ranch View Terrace project to minimize the potential for adverse effects on cultural resources in the event they are found on site (University of California, Santa Cruz 2003).

#### **Buried Cultural Resources**

If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or nonhuman bone are inadvertently discovered during ground-disturbing activities, work would stop in that area and within 100 feet of the find until a qualified archaeologist could assess the significance of the find, and, if necessary, develop appropriate treatment measures.<sup>1</sup>

The construction contractor and lead contractor compliance inspector will verify that work is halted until appropriate treatment measures have been implemented.

#### **Unidentified Human Remains**

Implementation of the following measure, in accordance with state regulations governing treatment of human remains (PRC Sec. 5097), will be applied if unidentified human remains

---

<sup>1</sup> Treatment measures typically include developing avoidance strategies, capping with fill material, or mitigating effects through data recovery programs such as excavation or detailed documentation.

were discovered or recognized in any location other than a dedicated cemetery during ground-disturbing activities.

No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains would occur until the County Coroner was informed and had determined that no investigation of the cause of death is required; and, if the remains were of Native American origin,

- the descendants of the deceased Native Americans have made a recommendation to the land owner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Section 5097.98 of the California Public Resources Code; or
- the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.

According to California Health and Safety Code, six or more human burials at a single location constitute a cemetery (Sec. 8100), and disturbance of Native American cemeteries is a felony (Sec. 7052). Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission.

## References Cited

---

Aldecoa, C.

- 1997 Historic Property Survey Report/Findings of Effect for the Proposed Improvements to Intersection of Coolidge Drive and Campus Facilities Access Road, University of California, Santa Cruz. Santa Cruz, CA. Prepared for University of California, Santa Cruz – Environmental Assessment Group.

Breschini, G.S., T. Haversat, R.P. Hampson, and Archaeological Consulting.

- 1983 A Cultural Resources Overview of the Coast and Coast-Valley Study Areas. Salinas, CA. Prepared for U.S. Bureau of Land Management.

Cartier, R.

- 1993a. *The Saunders Site: MNT-391, A Littoral Site of the Early Period*. Scotts Valley Historical Society Monograph No. 1.

- 1993b. *The Scotts Valley Site: CA-SCR-177*. Santa Cruz Archaeological Society Monograph No. 1.

Edwards, R., P. Podzorski, J. Pryor, and J. Toenjes

- 1978 Preliminary Archaeological Reconnaissance of the Lands of the University of California at Santa Cruz. Manuscript on file at Cabrillo College Archaeological Archives.

Harrington, J. P.

1942. Culture Element Distributions, XIX: Central California Coast. *University of California Anthropological Records* 7(1):1–46.

Hildebrandt, W. R., and P. Mikkelsen

1993. Archaeological Test Excavations of Fourteen Sites along Highway 101 and 152, Santa Clara and San Benito Counties, California, Vol. 1, Prehistory. Far Western Anthropological Group. Davis, CA. Prepared for California Department of Transportation, District 4. Contract No. 04E633-E.P.

Hylkema, M.

1991. *Prehistoric Native American Adaptations Along the Central California Coast of San Mateo and Santa Cruz Counties*. Unpublished Master's thesis, Department of Social Sciences, San Jose State University.

Jones, T. L.

1993. Big Sur: A Keystone in Central California Culture History. *Pacific Coast Archaeological Society Quarterly* 29(1):1–78

- JRP Historical Consulting Services.  
1997 Letter Report Regarding Historic Resources on the Historic Cowell Ranch.  
(September 30.) Davis. Prepared for University of California, Santa Cruz.
- Kyle, D. E.  
1990 Hoover, M. B, H. E. Rensch, E. G. Rensch, and W. N. Abeloe. *Historic Spots in California*. Revised by Douglas E. Kyle. Stanford University Press, Stanford.
- Kroeber, A. L.  
1976 [1925] *Handbook of the Indians of California*. Dover Publications, New York.
- Levy, R.  
1978 Costanoan. Pages 485–495 in R.L. Heizer (ed.), *Handbook of North American Indians* (Volume 8, California). Smithsonian Institution, Washington, DC.
- Paul Rodrigues Landscape Architecture et al.  
1992 Historic Cowell Ranch Cultural Landscape Report. Santa Cruz, CA.
- U.S. Department of the Interior, National Park Service.  
1991 *How to Apply the National Register Criteria for Evaluation*. (National Register Bulletin 15.) USDI National Park Service, Washington DC.
- University of California, Santa Cruz. 2003. Draft Environmental Impact Report, Emergency Response Center Project. Prepared by University of California, Santa Cruz EAG. Santa Cruz, California.



# Appendix

---